

U.S. Environmental Protection Agency

EPA Region 5 Records Ctr.



224291

Superfund Law and Procedures for sediment sites

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October 19, 2004**

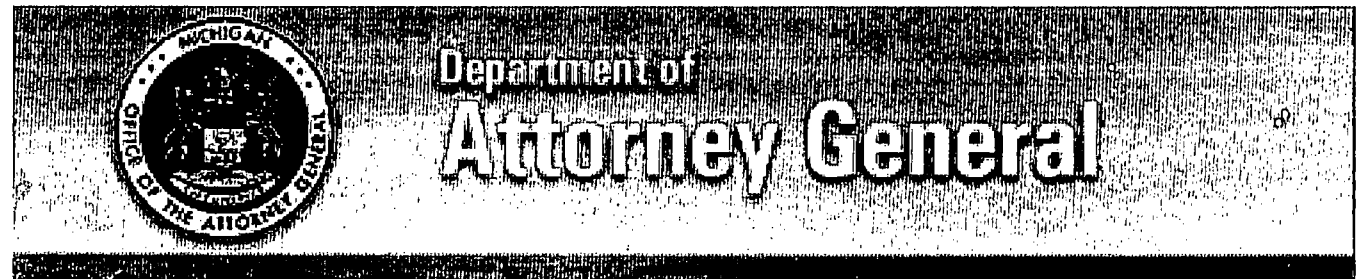
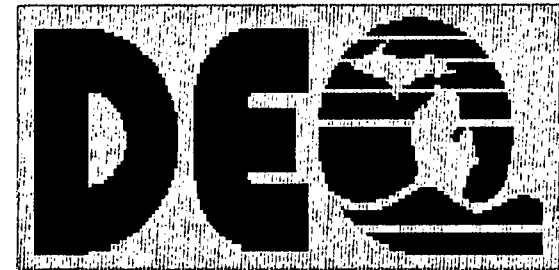
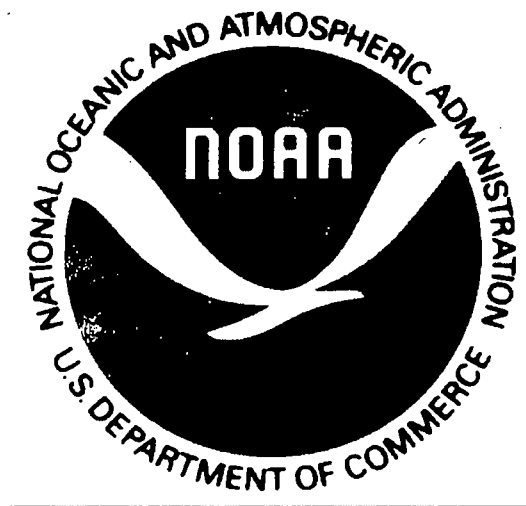
CERCLA

***Comprehensive Environmental Response
and Liability Act (“Superfund”)***

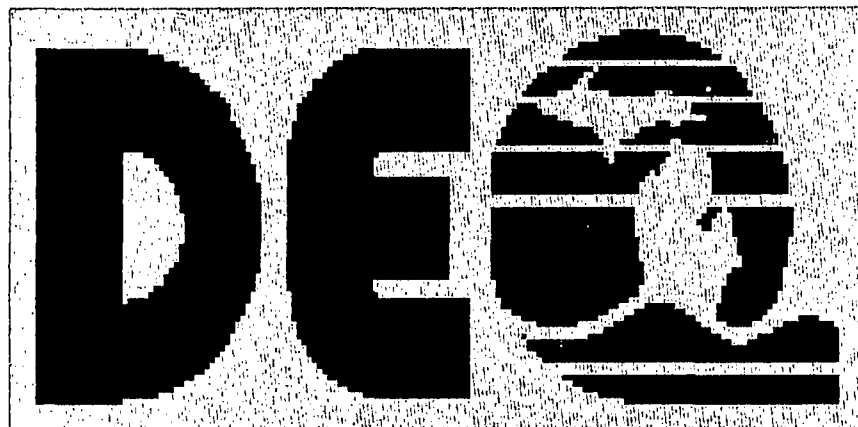
- 1. History & background**
- 2. Evaluations & Investigations**
- 3. Decision process**
- 4. Post-decision activities & legal considerations**

	“SUPERFUND”	Natural Resource Damages
Goal	Cleanup	Restoration/ Compensation
Focus	Public health, welfare & environment	Natural Resources
Cleanup Funding	EPA or Responsible Parties	Responsible Parties
Federal lead	U.S. EPA	U. S. Fish & Wildlife Service

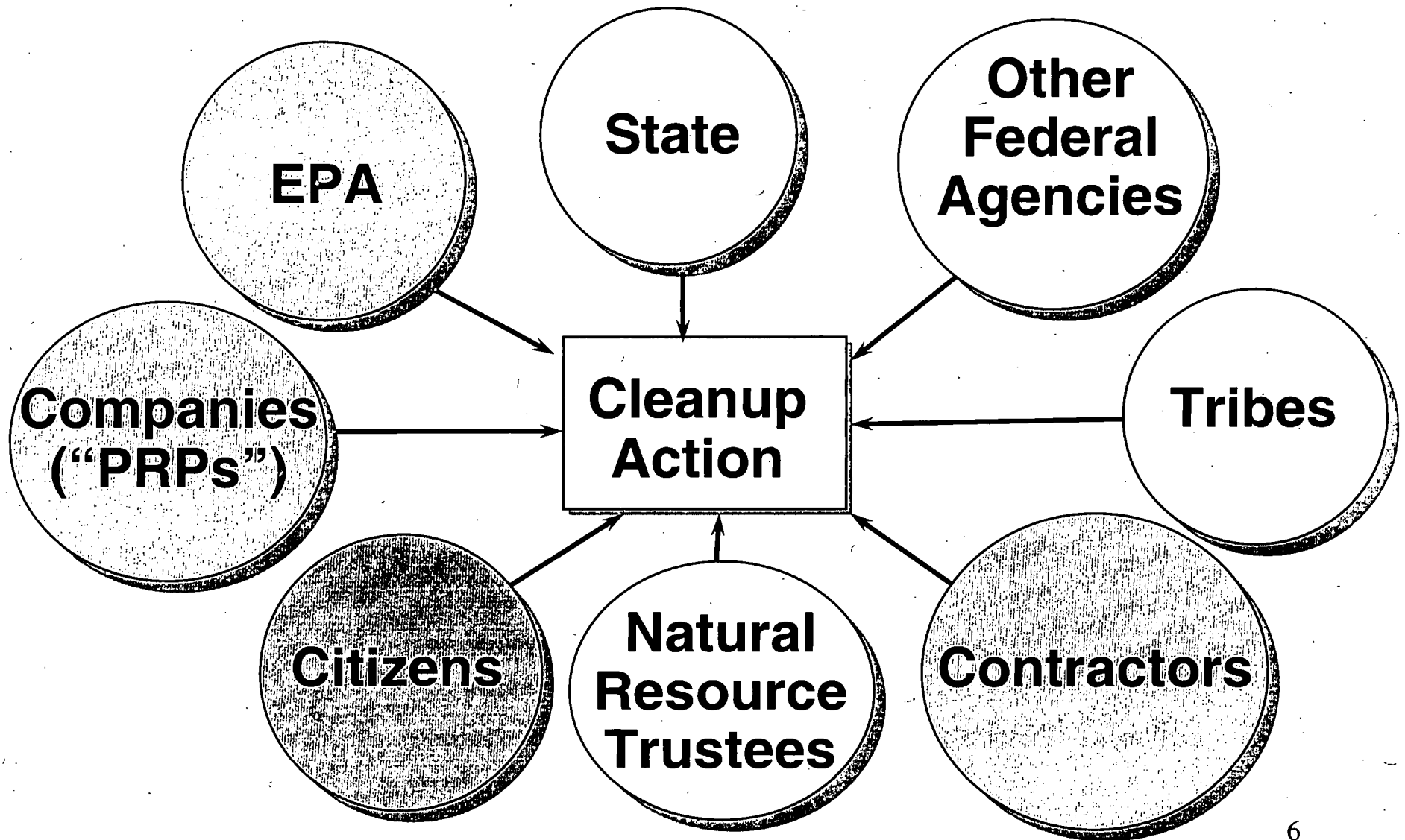
Kalamazoo River “Trustees”



Kalamazoo River Cleanup



Superfund Participants



Superfund

- **Federal authority (EPA)**
- **Identifies sites with chemical risks to humans or wildlife**
- **Site cleanup**
- **Potentially Responsible Parties (PRPs) pay for cleanup**

Origin of Superfund

- **Late 1970's & early 1980's: several sites gained national attention**
 - **Love Canal, New York**
 - **“Valley of Drums” (Brooks, Kentucky)**
- **1980: U.S. Congress passed “Superfund”**
- **1986: National Contingency Plan – provides details of Superfund Process**

Superfund

Basic principles

- **Decisions based on science and engineering**
- **Decision basis in official written record**
- **Community involvement**

Superfund

Basic principles

- **Potentially Responsible Parties (PRPs) pay for cleanup**
- **Risk management program (not “restoration”)**

Superfund

- **“Emergency” or time critical risk**
 - **“Imminent and substantial endangerment”**
 - **Quick evaluation & fast action**
 - **On-Scene Coordinator**
- **Longer-term risks**
 - **More thorough investigation and evaluation**
 - **Generally larger & more complex than “time critical” sites**
 - **Remedial Project Manager**

Superfund Sites

- **Abandoned warehouses**
- **Manufacturing facilities and processing plants**
- **Landfills**

Superfund Sites

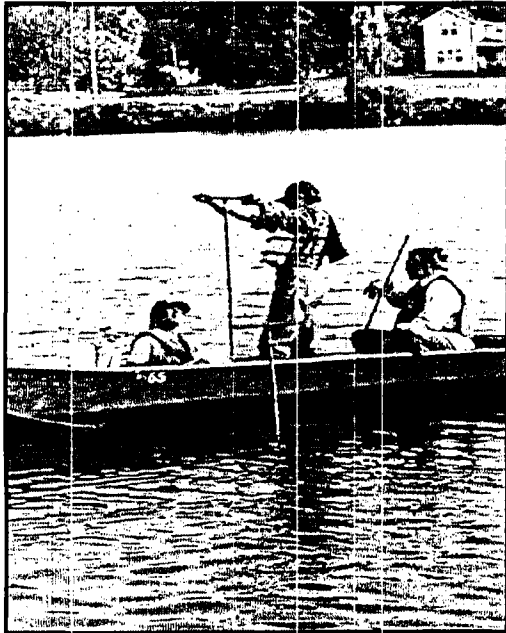
(continued)

- **Contaminated rivers and lakes**
- **Mines**
- **Military facilities**
- **Emergency situations (e.g., truck/rail spills, tire fires)**

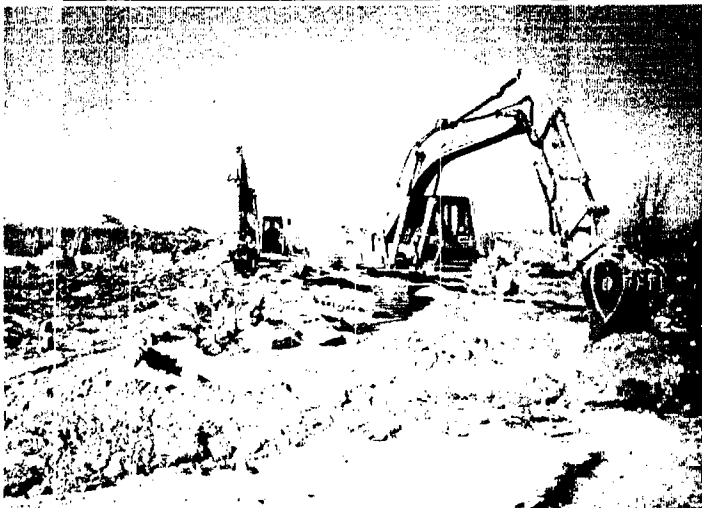
Who Cleans Up Sites?

- **PRPs**
 - **Contractors usually do work**
 - **EPA oversight**
- **EPA: if no “responsible parties”**

Superfund - what happens?



1. Define problem
(sampling, etc.)
2. Evaluate possible
solutions
3. Final decision after
public input
4. PRPs do cleanup



Remedial Investigation

(defines problem)

- **General background**
- **Sampling and analysis –extent of contamination**
- **Risk Assessment: determines current risks to humans and wildlife**

Feasibility Study

(evaluates cleanup options)

- **Determine cleanup levels**
- **Screen alternatives**
- **Detailed and comparative analysis of alternatives - 9 criteria**

Feasibility Study

9 Criteria

Threshold Criteria

- 1. Protection of human health and the environment**
- 2. Compliance with Applicable or Relevant and Appropriate Requirements (“ARARs”)**

Feasibility Study

9 Criteria

Balancing Criteria

- 3. Implementability**
- 4. Long-term effectiveness**
- 5. Short-term effectiveness**
- 6. Treatment preference**
- 7. Cost effectiveness**

Feasibility Study

9 Criteria

Modifying Criteria

8. State acceptance

9. Community acceptance

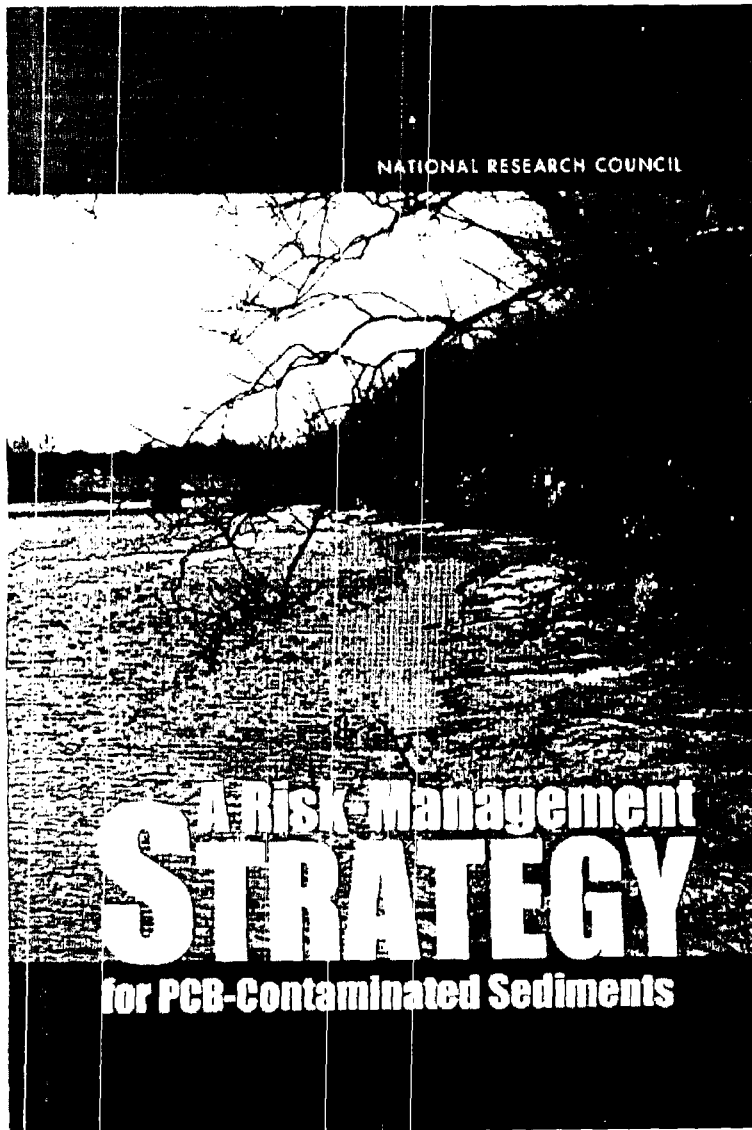
9 Criteria Evaluation – Fox River OU 1

Operable Unit 1. Little Lake Butte des Morts							
Yes = Fully meets criteria Partial = Partially meets criteria No = Does not meet criteria	Alternative A No Action	Alternative B Monitored Natural Recovery	Alternative C1 Dredge with off site disposal	Alternative C2 Dredging with off site disposal	Alternative D Dredge to a Confined Disposal Facility	Alternative E Dredge and Vitrification	Alternative F In Situ Capping
1. Overall protection of human health and the environment	No	No	Yes	Yes	Yes	Yes	Yes
2. Compliance with Applicable or Relevant & Appropriate Requirements	No	Partial	Yes	Yes	Yes	Yes	Yes
3. Long-term Effectiveness and Permanence	No	No	Yes	Yes	Yes	Yes	Partial
4. Reduction of Contaminant Toxicity, Mobility, or Volume through Treatment	No	No	Yes	Yes	Yes	Yes	Partial
5. Short-term Effectiveness	No	No	Yes	Yes	Partial	Partial	Partial
6. Implementability	Yes	Yes	Yes	Yes	Partial	Partial	Partial
7. Cost (millions of \$)	\$ 4.5	\$ 9.9	\$ 116.7	\$ 66.2	\$ 68.0	\$ 63.6.0	\$ 90.5
8. Agency Acceptance	The WDNR has been the lead agency in developing the RI/FS and the ROD. Both WDNR and EPA support the selected alternative for this OU at the 1.0 ppm action level.						
9. Community Acceptance	The level of community acceptance of the selected alternative is outlined in the Responsiveness Summary.						

More process stuff for large sediment sites...

- **Contaminated Sediment Technical Advisory Group (CSTAG)**
- **Remedy Review Board**

Contaminated Sediment Technical Advisory Group (CSTAG)



- **CSTAG & 11 *Sediment Principles* grew out of National Research Council 2001 report**
- **<http://books.nap.edu/catalog/10041.html>**

Contaminated Sediment Technical Advisory Group (CSTAG)

- **Sediment sites**
 - **Large**
 - **Controversial**
 - **Complex**
- **Consistency with *11 Sediment Principles***
- **EPA review panel**
 - 1. Remedial Project Managers (10 EPA regions)**
 - 2. Headquarters**
 - 3. Office of Research and Development**

CSTAG Process

- 1. Region submits memo to review panel**
 - Early in RIFS
 - Memo addresses *11 Sediment Principles*
- 2. Site visit and meeting**
 - Site tour
 - Review of site characteristics, history, etc.
 - Stakeholder dialogue
- 3. CSTAG comments incorporated with
Remedy Review Board comments**

Superfund

11 Risk Management Principles

- 1. Control sources early**
- 2. Involve community early and often.**
- 3. Coordinate with States, local governments, Tribes and Natural Resource Trustees**
- 4. Develop and refine a conceptual model considering sediment stability**

Superfund

11 Risk Management Principles

- 5. Use iterative approach in a risk-based framework**
- 6. Evaluate assumptions and uncertainties associated with Site characterization data and Site models**
- 7. Select site-specific approaches to achieve risk-based goals**

Superfund

11 Risk Management Principles

- 8. Ensure cleanup levels are tied to risk goals**
- 9. Maximize effectiveness of Institutional Controls and recognize limitations.**
- 10. Design remedies to minimize short-term goals while achieving long-term protection**
- 11. Monitor during and after remediation to assess and document remedy effectiveness**

Remedy Review Board

- **For remedies with costs more than \$30 million**
- **The “Board”**
 - **20 senior management, technical and/or policy experts**
 - **EPA HQ, Research, and 10 regional offices**

Remedy Review Board

- **EPA region provides information to the “Board”**
 - **Site history & contamination description**
 - **Risk Assessment**
 - **Cleanup alternatives**
 - **Preliminary Proposed Plan**
- **Review occurs prior to Proposed Plan**

Remedy Review Board

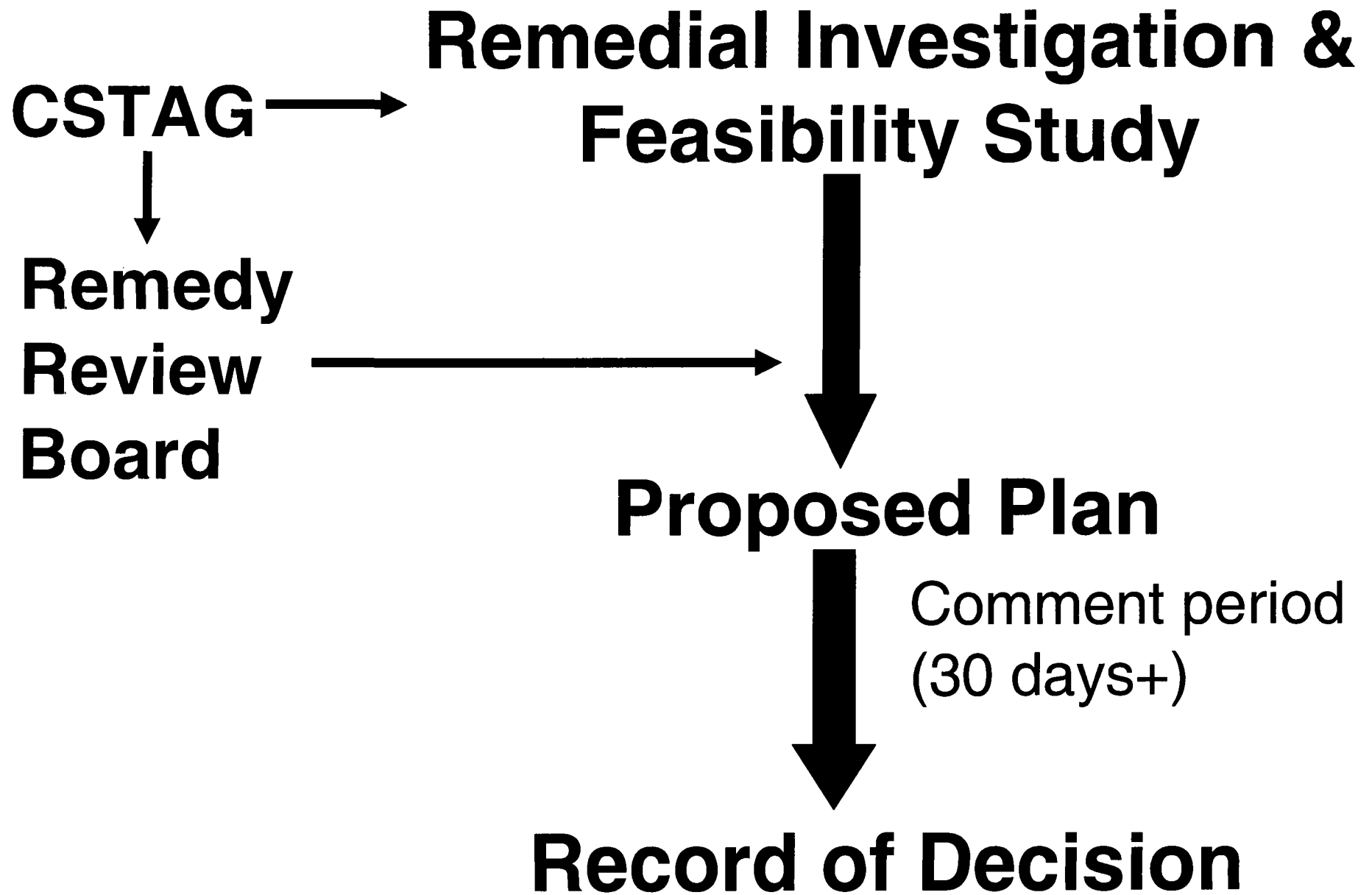
- **PRPs, TAG, Trustees, and State can submit comments**
- **Board meeting: EPA and the State attend**
- **Board makes advisory comments to region**

Proposed Plan

- **Agency's preliminary recommendation for site cleanup**
- **Summary of Remedial Investigation and Feasibility Study**
- **Solicits public input**

Record of Decision

- **After consideration of public comments on Proposed Plan**
 - All substantive comments responded to in Responsiveness Summary
 - Proposal sometimes changed in response to comments
- **Summary of investigations**
- **Administrative Record documents basis for decision**
- **Agency's final decision**



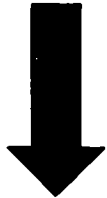
Record of Decision



**Consent Decree or
Unilateral Administrative Order**



Design



Cleanup
(PRPs or EPA)

Settlement & Negotiations

- **Record of Decision: basis for settlement discussions - decision not negotiable**
- **Consent Decree - settlement agreement to implement the Record of Decision**
- **Administrative Order - option if negotiations unsuccessful**

Legal Issues – Superfund

Possible Legal Challenges

- **Compliance with National Contingency Plan (NCP)**
- **“Arbitrary and capricious”**
- **Record Review if challenged: based on Administrative Record**

Legal Issues - Superfund

- **Responsible parties liable - even if actions were legal**
- **Joint and several liability**
- **Strong preference for settlement and voluntary action - court cases rare**

Discussion, questions, etc.

